



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,146	06/24/2002	Klaus Winter	10191/2063	9486

7590 03/26/2007
Richard L Mayer
Kenyon & Kenyon
One Broadway
New York, NY 10004

EXAMINER

PIERRE LOUIS, ANDRE

ART UNIT	PAPER NUMBER
----------	--------------

2123

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/980,146	Applicant(s) WINTER ET AL.	
	Examiner Andre Pierre-Louis	Art Unit 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-10 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The communication filed on 1/16/2007 has been received and fully considered.
2. Claims 9 and 10 have been withdrawn from consideration; now claims 6-8 are presented for examination.

Response to Arguments

3. Applicant's arguments filed 11/27/2006 have been fully considered but they are moot in view of the new ground of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 4.0 Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nier et al. (U.S. Patent No. 4,063,237), in view of Hering et al. (U.S. Patent No. 5,440,109).

4.1 With regards to claims 6-8, Nier et al. substantially teaches a method for a motor vehicle having adaptive distance and speed control for lane allocation of consecutive vehicle on a multi-lane roads (*fig.1-2, title, col.2 lines 46-54*), and particularly teaches the step of: carrying out the lane allocation in a model-based manner via a frequency distribution of lateral displacement of detected radar objects (*see fig.3-4, col.5 lines 23-41*); means for correlating a determined frequency distribution with one of (a) stored models for frequency distributions of lateral displacements, relating to lane allocation for multi-lane roads having a define width and (b) characteristic lateral displacement histograms for different lanes used by succeeding vehicle

(*fig.3-4, col.5 line 36-col.6 line 41*); means for outputting a model part having a highest correlation to the determined frequency distribution as a lane hypothesis, the lane hypothesis including a number of lanes and a lane used by one's own vehicle (*fig.3 (38,39), fig.6-7, col.5 line 36-col.6 line 41*). Although, Nier et al. does not clearly state the terms correlating the frequency, adaptive distance and speed control, he teaches a system that measures the distance for spacing of moving vehicles, such as ACC system (*see title*) and further teaches a multi-lane road with vehicles (*11,12,13*) in *fig.1* equipped with receiver/transmitter for receiving and transmitting lane during allocation. Nevertheless, Hering substantially teaches a system for lane allocation with means for correlating frequency distribution (*see fig.2, col.2 line 64-col.3 line 4; also see col.4 lines 15-56*). Nier et al. and Hering et al. are analogous art because they are from the same field of endeavor and that the system teaches by Hering is similar to that of Nier et al. Therefore it would have been obvious to one ordinary skilled in the art at the time of the applicant's invention to combine the system of Hering with distance measuring system of Nier et al. because Hering teaches the advantage of using the localization means in addition to existing communication module for the exact localization of the vehicle (*col.2 lines 14-23*).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2123

5.0 Claims 6-8 are further rejected under 35 U.S.C. 102(e) as being anticipated by Nakamura et al. (U.S. Patent No.6, 311,123).

5.1 Regarding claims 6-8, Nakamura et al. teaches a method for a motor vehicle having adaptive distance and speed control for lane allocation of consecutive vehicle on a multi-lane roads (*fig.1-2, col.5 lines 48-53*), and particularly teaches the step of: carrying out the lane allocation in a model-based manner via a frequency distribution of lateral displacement of detected radar objects (*see col.3 lines 17-41*); means for correlating a determined frequency distribution with one of (a) stored models for frequency distributions of lateral displacements, relating to lane allocation for multi-lane roads having a define width and (b) characteristic lateral displacement histograms for different lanes used by succeeding vehicle (*fig.2, col.3 lines 17-41 & col.4 lines 12-65*); means for outputting a model part having a highest correlation to the determined frequency distribution as a lane hypothesis, the lane hypothesis including a number of lanes and a lane used by one's own vehicle (*fig.3 (35,37), fig.13, col.5 lines 3-53*).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6.1 Alland et al. (U.S. Patent No. 5,964,822)) teaches an automatic sensor azimuth alignment.

6.2 Gilling (U.S. Patent No. 5,761,629) teaches a method and apparatus for cruise control.

6.3 Takahashi (U.S. Patent No. 5,901,806) teaches a vehicle speed control system.

6.4 Breed et al. (U.S. Patent No. 6,526,352) teaches a method and arrangement for mapping a road.

6.5 Khodabhai (U.S. Patent No. 5,959,569) teaches a method and apparatus for in path target determination for an automotive vehicle using gyroscopic device.

6.6 Bernhard et al. (U.S. Patent No. 6,388,565) teaches a guidance system for assisting lane change of a motor vehicle.

7. Claims 1-5 have been canceled and claims 9-10 are withdrawn from consideration.

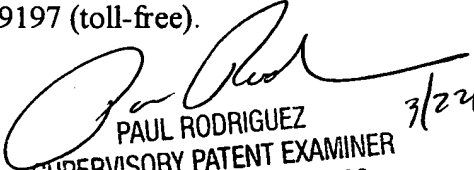
8. Claims 6-8 are rejected and **THIS ACTION IS Non-FINAL**. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Pierre-Louis whose telephone number is 571-272-8636. The examiner can normally be reached on Mon-Fri, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 20, 2007

APL


PAUL RODRIGUEZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100
3/22/07